

3. The method of claim 1 wherein the mouthpiece includes a mouthpiece chamber having a mouth port for communication with the patient's mouth, an outlet port, and an air supply port through which the air pressure is supplied to the mouthpiece.

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4.(Amended) The method of claim 3 wherein air pressure is supplied to the air supply port of the mouthpiece to maintain a net flow of air to the air supply port and out of the outlet port.

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5.(Amended) A chest wall oscillation method comprising:
applying an oscillating compressive force to a chest of a patient which includes a steady state force component and an oscillating force component; and
supplying air pressure to a mouthpiece in communication with a mouth of the patient to at least partially cancel the steady state force component and provide an oscillating air pressure component.

6. The method of claim 5 wherein the steady state air pressure component at least approximately equals a mean pressure exerted on the patient's chest by oscillating compressive force.

7. The method of claim 5 wherein the mouthpiece includes a mouthpiece chamber having a mouth port, an outlet port, and an air supply port through which the air pressure is supplied to the mouthpiece.

Sub B1
8.(Amended) The method of claim 5 wherein air pressure is supplied to the air supply port of the mouthpiece to maintain a net flow of air to the air supply port and out of the outlet port.

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9.(Amended) A chest wall oscillation system comprising:
a chest wall force applicator for applying to a chest of a patient an oscillating compressive force having a steady state force component and an oscillatory force component;

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a mouthpiece having a mouth port for positioning in communication with a mouth of the patient, an outlet port and an air supply port;
an air pressure supply connected to the air supply port; and
a control system which coordinates operation of the chest wall force applicator and the air supply so that the air supply provides air to the air supply port according to an air pressure waveform having a time-varying pressure component and having a steady state pressure component which at least partially cancels the steady state force component.

10.(Amended) The system of claim 1 wherein air is supplied to the air supply port of the mouthpiece to maintain a net flow of air to the air supply port and out of the outlet port.

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~~11. A chest wall oscillation method for removal of mucus from a lung of a patient, the method comprising:~~

~~applying an oscillating compressive force to a chest of a patient; and
supplying air pressure to a mouthpiece in a direction and magnitude which tends to counteract a steady state force component of the oscillating compressive force.~~

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~~12. The method of claim 11 wherein the oscillating compressive force includes a steady state force component and an oscillating force component.~~

~~13. The method of claim 11 wherein the air pressure includes an oscillating air pressure component and a steady state air pressure component.~~

*Sub
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~~14. A chest wall oscillation method for removal of mucus from a lung of a patient, the method comprising:~~